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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/675,194	09/29/2000	Gary D. Zimmerman	13036/4 (MP0965)	1444
60537	7590	08/22/2006	EXAMINER	
BRINKS HOFER GILSON & LIONE/MARVELL P.O. BOX 10395 CHICAGO, IL 60610			PHAM, THIERRY L	
			ART UNIT	PAPER NUMBER
			2625	

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Interview Summary	Application No.	Applicant(s)	
	09/675,194	ZIMMERMAN, GARY D.	
	Examiner	Art Unit	
	Thierry L. Pham	2625	

All participants (applicant, applicant's representative, PTO personnel):

(1) Thierry L. Pham. (3) _____.

(2) Amir Penn. (4) _____.

Date of Interview: 08 August 2006.

Type: a) Telephonic b) Video Conference
c) Personal [copy given to: 1) applicant 2) applicant's representative]

Exhibit shown or demonstration conducted: d) Yes e) No.
If Yes, brief description: _____.

Claim(s) discussed: 9,30 and 42.

Identification of prior art discussed: Terashima et al (US 6538762).

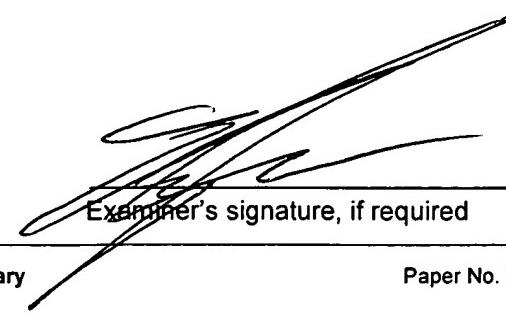
Agreement with respect to the claims f) was reached. g) was not reached. h) N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Discussions include proposed amendment (see attached copy) and the cited prior art of record (US 6538762).

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.



Examiner's signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner.
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

DRAFT**Amendments to the Claims:**

This listing of the claims will replace all prior versions, and listings, of the claims in the application.

Listing of the Claims:

1.-8. (Withdrawn)

9. (Currently Amended) The single continuous cable of claim [[30]] 38 wherein the printer controller comprises:

a) ~~a random access memory for storing a non-resident printer controller program;~~
[[b]] a processor for executing computer programs coupled to the ~~random access volatile memory~~; and

[[c]] a dynamic loading program for causing the processor to automatically manage managing the download of the non-resident printer controller program to the random access volatile memory and for automatically determining whether the printer controller program is compatible with the print engine and the printer controller;

d) a print controller ready data interface for receiving print controller ready data (PCRD) from the source;

e) a print engine ready data interface for providing print engine ready data (PERD) to the printer;

~~wherein the printer controller receives the print controller ready data and based thereon generates print engine ready data.~~

10. (Currently Amended) The single continuous cable of claim 9 wherein the dynamic loading program, ~~when executing on the processor, determines whether a current version of the printer controller program resident in the volatile memory is not valid, and selectively downloads from the source the non-resident printer controller program to the volatile memory of the printer controller when it is determined that if the~~

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current version of the printer controller program ~~saident in the windows access memory, is not valid~~

11. (Canceled)
12. (Currently Amended) The single continuous cable of claim 10 wherein the printer controller program, when executing on the processor, receives the print controller ready data and based thereon generates the print engine ready data for controlling a print engine.
13. (Currently Amended) The single continuous cable of claim 9 further comprising:
an integrity check module, when executing on the processor, for performing an integrity check on the printer controller program to determine whether the printer controller program is valid, corrupted and re-installing the printer controller program ~~from the source when the printer controller program is not valid corrupted, performing compatibility tests to determine whether the printer controller program is compatible with the printer controller and a printing software, re-installing the printer controller program from the source when the printer controller program not compatible with the printer controller and the printing software.~~
14. (Currently Amended) The single continuous cable of claim 9 wherein the printer controller is embodied in one of a single integrated circuit and an application specific integrated circuit (ASIC).
- 15.-20. (Canceled)
- 21.-29. (Withdrawn)
30. (Currently Amended) A single continuous cable comprising:
a first connector having a print controller ready data interface for receiving print controller ready data (PRCD);

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a second connector having a print engine ready data interface for providing print engine ready data (PERD); and

disjunctive OR
a printer controller within the single continuous cable, the printer controller connected to the first connector and the second connector internal to the cable, the printer controller configured to receive for receiving the print controller ready data from the print controller ready data interface and based thereon for generating to generate print engine ready data for transmission to the print engine ready data interface.

31. (Currently Amended) The single continuous cable of claim 30 further comprising:

a cable format conversion mechanism for converting signals in a first format into corresponding signals in a second format, the cable format conversion mechanism within the single continuous cable.

32. (Currently Amended) The single continuous cable of claim 30 further comprising:

a multiple target device support mechanism for supporting at least two different types of target devices, the multiple target device support mechanism within the single continuous cable.

33. (Currently Amended) The single continuous cable of claim 32 wherein the multiple target device support mechanism further comprises[.]:

a laser printer interface for providing an interface to a laser printers;
a non-impact printer interface for providing an interface to a non-impact ink printers; and

a common formatting circuit coupled to the laser printer interface and the non-impact printer interface for providing functions to the laser printer interface and the non-impact printer interface.

34. (Canceled)

35. (Canceled)

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36. (Currently Amended) The single continuous cable of claim 30 wherein the print controller ready data interface includes comprises one of an industry standard computer port interface, a parallel port interface, a serial port interface, IEEE 1284 parallel port interface, a USB serial port interface, and an Ethernet interface.
37. (Currently Amended) The single continuous cable of claim 30 wherein the print engine ready data (~~PERD~~) interface includes comprises one of a parallel port interface, a serial port interface, an IEEE 1284 parallel port interface, a USB serial port interface, an Ethernet interface, and a custom interface.
38. (New) The single continuous cable of claim 30 wherein the printer controller comprises a printer controller program for generating the print engine ready data, the printer controller program stored in a memory consisting of volatile memory.
39. (New) The single continuous cable of claim 30 wherein the printer controller is configured to send commands to a print engine, to receive a status signal from the print engine in response to the commands sent, and to transfer the print engine read data to the print engine after receiving the status signal.
40. (New) A single continuous cable comprising:
means for interfacing with a host computer to receive print controller ready data;
means within the single continuous cable for generating print engine ready data from the print controller ready data; and
means for providing the print engine ready data to a printing device.
41. (New) The cable of claim 40 further comprising:
means for storing in a volatile memory a printer controller program that generates the print engine ready data from the print controller ready data; and
means for automatically managing download of the printer controller program to the volatile memory.

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42. (New) The cable of claim 41 wherein the means for automatically managing download determines whether a current version of the printer controller program resident in the volatile memory is not valid, and downloads the printer controller program to the volatile memory of the printer controller if the current version of the printer controller program is not valid.

FACSIMILE COVER SHEET

Date: July 27, 2006

To: Examiner Thierry L. Pham
Fax No: (571) 273-7439

From: Amir N. Penn
Tel. No: 312-245-5371

U.S. Serial No.: 09/675,194
Our Client/Matter No.: 13036-4

Re: Draft claims for interview

No. of Pages
(inc. this page): 6

Confirmation Copy To Follow: No

IF YOU HAVE ANY PROBLEMS RECEIVING THIS MESSAGE,
PLEASE CALL 312-321-4200 AND ASK FOR: Maria Meister @ Ext. 3456

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COVER MESSAGE:

Examiner Pham:

Following up on our conversation, enclosed are a draft set of claims. I will telephone you to set up a time for an interview.

Regards,

Amir Penn